

AMENDMENTS TO THE CLAIMS

Please replace the claims with the following amended listing:

1. (Previously Presented) An illumination unit for point illumination of a medium comprising a plurality of light emitters comprised of light guides arranged to illuminate an illumination face via a light valve arrangement comprising a plurality of electrically controlled light valves, each of at least two of the light emitters being arranged to illuminate a plurality of light valves.

2. (Previously Presented) An illumination unit according to claim 1, further comprising a first lens arrangement comprising at least one micro lens arranged with respect to each light valve so that the light emitted by the light emitters is focused on or in the vicinity of the optical axis of the individual light valves.

3. (Previously Presented) An illumination unit according to claim 1, further comprising a micro lens arranged between the light valves and the illumination face, so that light transmitted through a light channel of an individual light valve is focused on the illumination face.

4. (Previously Presented) An illumination unit according to claim 1, wherein the optical light comprises optical fibres.

5. (Previously Presented) An illumination unit according to claim 1, further comprising at least one light source comprising a short arc gap lamp

6. (Previously Presented) An illumination unit according to claim 5, wherein the short arc gap lamp comprises light receiving optical light guides or fibres arranged within an angle of $\pm 75^\circ$ with respect to the equatorial axis of the lamp on a ball face around the lamp, and optically connected to and conduct light to the light emitters.

7. (Currently Amended) An illumination unit according to claim 1, further comprising at least one light source, wherein said at least one light source comprises a laser source.

8. (Previously Presented) An illumination unit according to claim 1, wherein each of the light guides is optically connected to a light source arranged to illuminate a plurality of the light valves arranged in a given face shape, and further comprising at least one collimation lens arranged between the light emitter and the face shape so that collimated light is conducted to a first micro lens arrangement associated with the plurality of light valves.

9. (Previously Presented) An illumination unit according to claim 8, wherein the face shape of the light valves forms one or more hexagons.

10. (Previously Presented) An illumination unit according to claim 8, wherein the individual light valves are arranged in rows in a transverse direction of the face shape, the light valves being disposed at a given mutual distance, and the rows being mutually offset in the transverse direction.

11. (Previously Presented) An illumination unit according to claim 8, wherein the rows are arranged such that the projection of all the individual light valves in the transverse direction in the face shape results in a plurality of illumination points at a mutual distance in the transverse direction.

12. (Previously Presented) An illumination unit according to claim 1, wherein a face shape of the light valves is arranged on one or more illumination heads, each illumination head and the illumination face being adapted to perform a relative movement across an illumination area, and further comprising a control unit for controlling the light valves in dependence on the relative movement between the illumination head and the illumination face.

13. (Currently Amended) An illumination unit according to claim 12, wherein the illumination head comprises an illumination system movable relative to the illumination face in a single progressing movement transverse to the direction of ~~the~~ a rod.

14. (Previously Presented) An illumination unit according to claim 1, wherein the illumination unit between the light valve arrangement and the illumination face

additionally comprises optical means for spreading the light beams emitted by the light channels across the illumination face.

15. (Previously Presented) An illumination unit according to claim 1, wherein the light valves of the illumination unit are formed by electrooptically based light valves, comprising one of LCD, PDLC, PLZT, FELCD or Kerr cells.

16. (Previously Presented) An illumination unit according to claim 1, wherein the light valves of the illumination unit are formed by reflection based electromechanical light valves.

17. (Previously Presented) An illumination unit according to claim 1, wherein the light valves of the illumination unit are formed by transmission based electromechanical light valves.

18. (Previously Presented) An illumination unit according to claim 1, wherein the light guides of the illumination unit are so arranged with respect to the light valve arrangement that the optical energy fed to a subset of light valves does not differ significantly from each other when the subsets of light valves illuminate adjacent areas or areas close to each other on the illumination face.

19. (Previously Presented) An illumination unit according to claim 1, wherein light receiving ends of the light guides are gathered in at least one bundle which directly or

indirectly receives light from a reflector or a reflector system optically connected to at least one lamp.

20. (Previously Presented) A method of point illumination of a medium by means of a plurality of light emitting light guides arranged to illuminate an illumination face via a light valve arrangement, said light valve arrangement comprising a plurality of electrically controlled light valves, comprising illuminating a plurality of light valves with each of at least two of the light emitters.

21. (Previously Presented) A method according to claim 20, including focusing the light emitted by the light emitter on or in the vicinity of the optical axis of the individual light valves via a lens arrangement comprising at least one micro lens arranged with respect to each light valve.

22. (Previously Presented) A method according to claim 21, including focusing the light transmitted through the light channel of the individual light valve on the illumination face via a second micro lens arrangement arranged between the light valves and the illumination face.